CITY OF SAN ANTONIO

PLANNING & DEVELOPMENT SERVICES
AND FIRE DEPARTMENTS

TO: All Planning & Development Services and Fire Department Customers

SUBJECT: **INFORMATION BULLETIN 143**
Fire Flow Test Reports

DATE: May 16, 2008
Revised January 7, 2010

The purpose of this Information Bulletin (IB) is to provide Planning and Development Services Department (PDSD) and San Antonio Fire Department (SAFD) customers with a standardized format with which to report water supply availability data to PDSD and SAFD for the purpose of obtaining building, automatic sprinkler, standpipe, and underground fire line permits. All code sections reference the 2009 International Fire Code, as amended by SAFD, unless otherwise noted. The City's fire code amendments can be found at http://www.sanantonio.gov/dsd/codes.asp.

Per 2009 IFC Section 507.1, an approved water supply capable of supplying the required fire flow for fire protection shall be provided to premises upon which facilities, buildings, or portions of buildings are constructed or moved into or within the jurisdiction. See Section 507.2 for approved types of water supplies. Per Section 507.4, approved documentation of the water supply test shall be provided to the fire code official for final approval of the water supply. This documentation shall be provided in the form of the **Fire Flow Test Report** (contained in this document).

A **Fire Flow Test Report** is required to be submitted for the following:

1. Building Permits
   a. All new structures 1,500 square feet or more in building area. When phased permitting is utilized (i.e. site work, foundation, superstructure, shell, and interior finish-out permit applications, or any combination thereof) the **Fire Flow Test Report** shall be submitted at the time when either a new underground fire water line (public or private) is proposed as part of the permit or any construction past the foundation stage is proposed.
   b. Regardless of size, all new structures classified as Group S-1 or Group H occupancies in accordance with Chapter 2.
   c. Modifications to existing buildings, or their contents, that increase the required fire flow as determined by Appendix B as amended, or by other approved methods as determined by the Fire Chief or his designee. Common examples are: building additions, change to a lesser type of construction, or changes of

building use to include high-piled combustible storage. See Section 508.3.1 for Fire Flow for Rural Isolated Areas for additional information.

d. Existing buildings with no Certificate of Occupancy.

2. Automatic Sprinkler System Permits

   a. All new sprinkler or standpipe systems required to be submitted for review.

   b. All modifications to sprinkler or standpipe systems required to be submitted for review. Sprinkler system modifications not requiring calculations per IB 140 are not required to submit a **Fire Flow Test Report**. In these instances, it is the responsibility of the design/installing contractor to evaluate adequacy of the water supply.

3. Underground Fire Line Permits

   a. When review of hydraulic calculations is required per Section 507.4(4), and where said review was not conducted during review of the building permit. See Section 507.5.6 for the design criteria for new fire mains.

The following is a list of procedures for preparation of a required **Fire Flow Test Report**.

i. The fire flow test shall be conducted by a qualified person(s) with the appropriate training on how to conduct a fire flow test.

ii. Per Section 507.4, the flow test shall be conducted on the fire hydrants nearest the project site unless other wise approved by the Code Official.

iii. Both the report preparer and a witness, usually the water purveyor, shall sign and date the report as testament to the accuracy of the results shown. The applicant is to contact the water purveyor to schedule and/or request a fire flow test.

- San Antonio Water System (SAWS) – 210-233-3926 or 210-233-3252
- Bexar Metropolitan Water District – 210-354-6563

iv. Per Section 507.4, the flow test shall have been conducted no more than twelve (12) months prior to the date of construction document submittal to the City.

v. Per Section 507.4, the test shall be conducted in accordance with the 2007 edition of NFPA 291, *Recommended Practice for Fire Flow Testing and Marking of Hydrants.* Report the pressure readings taken, discharge coefficient, outlet size, and number of outlets; then calculate and report the actual flow and flow at **25** psi.

vi. Provide a sketch of the flow test location. Items shown should include, but are not limited to, the following: flow and test hydrants, approximate water line location and size, streets (with labels), approximate location of the project site, elevation changes (if applicable).

vii. Fill out the **Fire Flow Test Report** completely. All the information is required for City staff review.

If you have any questions regarding this information, please contact the Fire Protection Review team at 210-207-8160 or 210-207-5006.

CITY OF SAN ANTONIO
PLANNING AND DEVELOPMENT SERVICES & FIRE DEPARTMENT

FIRE FLOW TEST REPORT

PROJECT INFORMATION:

Project Name: _____

Street Address: _____

City, State, Zip Code: _____

FIRE FLOW TESTING COMPANY INFORMATION:

Name of individual preparing this report: _____

Company represented: _____

Street Address: _____

City, State, Zip Code: _____

Telephone number: _____

Signature of the individual preparing report attesting to the accuracy of data contained herein:

_____

Date of this report: _____

WITNESS INFORMATION:

Name of individual witnessing flow test: _____

Company Represented: _____

Telephone Number: _____

Signature of the witness attesting to the accuracy of data in this report:

_____

FIRE FLOW INFORMATION:

Date and time of flow test: _____

Location of "flow" hydrant(s): _____

Location of "test" hydrant: _____

***Theoretical fire flow (gpm) available at **twenty-five (25) psi:** _____

***For Building Permit Application

FIRE FLOW TEST DATA SHEET

PROJECT INFORMATION:

Project Name: _____

Street Address: _____

City, State, Zip Code: _____

DATE	TIME AM PM	TEST HYDRANT		FLOWING HYDRANT					FLOWING HYDRANT					TOTAL FLOW	
		STATIC (psi)	RESI-DUAL (psi)	PITOT (psi)	DIA (in)	THEOR FLOW (gpm)	HYD COEF	ACTUAL FLOW (gpm)	PITOT (psi)	DIA (in)	THEOR FLOW (gpm)	HYD COEF	ACTUAL FLOW (gpm)	ACTUAL (gpm)	AT **25 psi** (gpm)

SKETCH FLOW TEST LOCATION: